

**REMARKS**

Claims 1 and 2 are pending in this application. By this Amendment, claim 1 is amended to even further clarify the subject matter therein, and non-elected claims 3-6 are canceled. No new matter is added by this Amendment.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Dougherty in the April 28, 2006 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

**I. Rejection Under 35 U.S.C. §102(b)**

Claims 1 and 2 are rejected under 35 U.S.C. §102(b) over U.S. Publication No. 2002/0190814 (Yamada). This rejection is respectfully traversed.

Claim 1 recites that the piezoelectric thin film has a surface on which the second electrode is disposed, the surface being polished and having a root mean square roughness of 2 nanometers or smaller.

Yamada discloses "with respect to the upper surface of the piezoelectric layer 62, the RMS variation of the height is preferably equal to 5% or less of the thickness (average value) of the piezoelectric layer." *See* Paragraph [0104] of Yamada. However, Yamada fails to disclose that an RMS (root mean square) roughness of 2.0 nm or smaller has been achieved for the top surface of the piezoelectric layer. Instead, Tables 1 and 2 of Yamada show that the RMS roughness of the top surface of the piezoelectric layer is 4 nm at a minimum.

In contrast, claim 1 recites that the surface of the piezoelectric thin film on which the second electrode is disposed (i.e., the top surface of the piezoelectric thin film) is polished to achieve an RMS roughness of 2 nm or smaller. Yamada fails to disclose polishing the top surface of the piezoelectric layer. Accordingly, Yamada does not disclose an RMS roughness of 2 nm or smaller for the top surface of the piezoelectric layer.

For at least the foregoing reason, and as acknowledged by the Examiner during the April 28, 2006 personal interview, Yamada fails to anticipate the subject matter of claim 1, as well as claim 2 depending therefrom.

Withdrawal of the rejection is requested.

**II. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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